



# Chino Valley Model Aviators, Inc Official News Letter



AMA Chapter #3798

IMAA Chapter 705

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www.chinovalleymodelaviators.com

*"To create an interest in, further the image of, and promote the hobby/sport of radio controlled aircraft"*

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*The worst day of RC flying still beats the best day of real work!*

### Support Our Local Hobby Shop



The Safeway Center  
Prescott Valley, AZ  
TONY & DONNA PACINI  
THEY SUPPORT OUR CLUB

## O'Connor's Corsair: Flaps, Gear Down Coming In



## ERAU DESIGN CLASS TESTS LATEST UAV



Professor Jim Helbling, far left, with his class and their latest UAV design. (See page 8)



## From the Desk of CVMA President Jay Riddle

The first Combat event of 2011 was a partial success. All the pilots that flew in the event had a GREAT time, however, Mother Nature showed that she is always the boss by blowing the second round of combat away with the wind.

Flying the event is EASY, if you can take off and land a Slo Stick you are qualified to enter. Just fly around like the other pilots and maybe make a cut or not ...It is fun. Build a combat ship and join the fun.

If you missed the first event, we attach a crepe paper streamer approximately 10 feet long to a short length of string fastened to the tail wheel. This event is a real test of ones depth of perception and good practice for all types of flying.

Don't forget the next club sponsored event is a T-28 race on Saturday, June 11. Dust off your T-28 and charge your batteries. If you don't have one of the T-28's Donna at Valley Hobby can

get you set up at a very reasonable price.

We owe a big debt of thanks to *Randy Meathrell*, our Vice President and Activities Director for putting together our activities for the year. This is a lot more difficult and involved than one would think. So next time you see Randy let him know how much we appreciate his tireless efforts.

We ran our schedule of events in our last issue so check out our 2011 events.

### MARK YOUR CALENDARS

- June 11 CVMA T-28 races
- July 4 Chino Valley July 4th Celebration
- July 9 Second CVMA Slow Stick combat event

### CVMA MEETINGS



Third Wed. of every month at 7pm.  
Prescott Airport

## ENGINE FUMES

By Bob Shanks



Member *Al Collins* added a meter box just adjacent to our charging table. This allows members to check what the current voltage is holding at and is very valuable when we have a lot of electrics at the field with folks charging a variety of batteries from nickel cadmium, nickel

metal hydride to lithium polymer power sources.

A great addition to our charging table. Some days virtually every charging outlet has something plugged in and we have 14 charging outlets! Electrics have become so popular. A big thanks to Al for this functional voltage readout.



### CVMA MEMBERS LIGHT UP YOUR AMBITIONS...



BUILD SOMETHING, BRING IT TO OUR NEXT MEETING!

### POLYCRYLIC FOR FOAM

On page 5 we have a "How To" article on using fiberglass cloth to glass foam. Mentioned is polycrylic to use with the cloth. What is polycrylic?

Minwax® Polycrylic® is a protective finish that's crystal clear, fast-drying protective topcoat for use over a variety of materials. It has very little odor, is non-flammable, cleans up easily with soap and water, and can be recoated in only 2 hours. Minwax® Polycrylic® resists damage from abrasion.

### CVMA NEWSLETTER

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President — Jay Riddle

Vice President — Randy Meathrell

Sect. /Treas. — Rick Nichols

Flight Instructor — John Stewart

Safety Officer — Tom Root

Board Member — Bob Noulin

Board Member — Dennis O'Connor

Newsletter Editor — Bob Shanks



# CVMA PILOTS AND THEIR AIRCRAFT



Chris Myhre's Jet Ranger at Sunset

A Ray Stone high wing design with a 4Stroke.



Tom's Stick coming in for a landing.



A Ray Stone's one wheel landing dance.



From left, Byron Cluckey, Sparky Thornton, Tom Jeffrey and John Stewart check out Tom's Stick



SBach fly-by.



John Stewart built Balsa USA Enforcer overhead.



Graham Johnson's SBach climbing into the blue.



# CVMA PILOTS AND THEIR AIRCRAFT



Eric Sauley's Pitts Python



Tom Jeffrey's Corsair



Graham Johnson's Eratic



John Stewart's little Enforcer with a Thunder Tiger .46 2 stroke engine built for Max Bandy's birthday.



Bud Mellor's glider atop Glenn Hiethold's launching airplane.



Searching for thermals.

Tom Root's RCM EP Funster



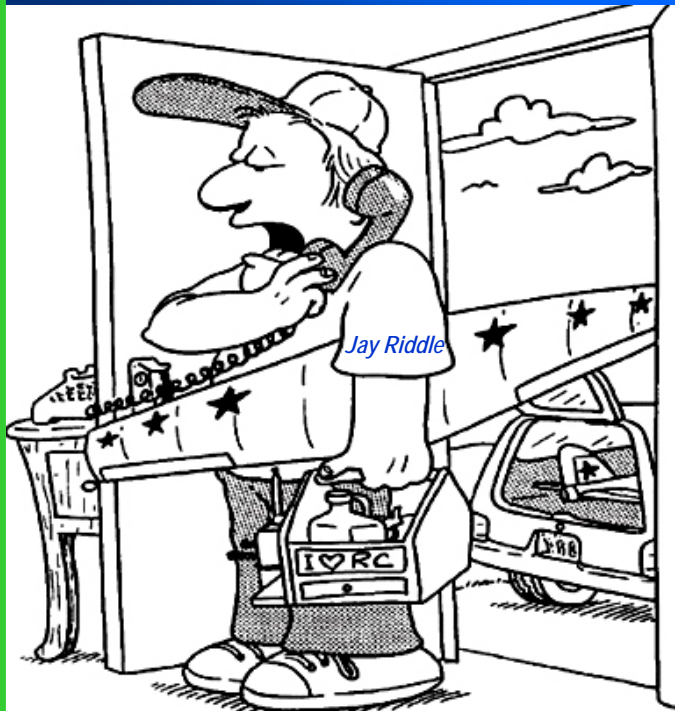
Glider just released.



Peanut gallery.



## CVMA NEW FIELD RESEARCHER



**"I won't be coming into the office today.  
I'll be out in the field doing research!"**

### TO IMPROVE DURABILITY TRY GLASSING YOUR FOAM MODEL

Foam has become a very popular material for RC airplanes. It's cheap, can be formed or cut into complex shapes, and is easily repaired with glue. Getting a good finish on foam is a bit different than for wood, or wood/fabric (film) airplanes. However, once the surface is smooth, many of the painting and detailing techniques are similar. Try glassing your foam ship, here's how:

1. Sand the foam smooth with sanding blocks (220 grit) to remove all the bumps and mold marks.
2. Fill holes and dents with lightweight spackle, then lightly sand again.
3. Apply ¾ ounce per square yard fiberglass cloth. Use a soft foam brush to spread water-based polycrylic on to adhere the cloth. (See page two for a description of polycrylic)
4. Sand again.
5. Apply two coats of polycrylic mixed with baby powder (50:50) as a filler. Use an old credit card to squeegee off the excess. The goal is to fill the weave of the fiberglass, but remove any extra filler (which just adds weight). Let dry and sand after each coat.
6. For primer, use latex house paint applied with a foam brush. A spray primer might work, just be aware that some of the propellants can eat foam, so test on a spare piece of foam.
7. After priming, wet sand to 600 grit.
8. Use Tamiya or Model Mas-

## Large Model Aircraft — Over 55 Pounds

By AMA Safety & Member Benefits Department

On January 25, 2011, AMA's Executive Council (EC) approved an update to the Large Model Aircraft Program. This program includes some significant changes. To review the document, go to:

[www.modelaircraft.org/files/520-a.pdf](http://www.modelaircraft.org/files/520-a.pdf).

One of the most prominent changes is the weight increase to 125 pounds for propeller-driven models (LMA) and 100 pounds for turbine-powered models (LTMA). There are four classifications referenced within the program: LMA-1, LMA-2, LTMA-1, and LTMA-2.

Classifications LMA-1 and LTMA-1 (55 pounds to 77.2 pounds) will allow for a self-inspection by the owner of the LMA or a Large Model Aircraft Inspector (LMAI). It will require two demonstration flights in front of two observers.

The owner can serve as one of the observers, as long as he/she is not the pilot of the model. The other observer has to be an AMA Contest Director (CD), Leader Member (LM), or Large Model Aircraft Inspector (LMAI). Classifications LMA-2 and LTMA-2 will require inspection by an LMAI followed by demonstration flights observed by the inspector.

Please note that all required documentation (as outlined in the program) has to be received by AMA Headquarters no later than 30 days after being issued for the permit to be valid! AMA Headquarters will send a receipt notification to the owner listed on the Permit to Fly and update the Web site listing. This document can be found in the "Members Only" section. →

ter acrylics (used for plastic models) in a single action airbrush. Stock paint thinner works best for this. Spray cans are another option, just test for compatibility first on a foam scrap.

9. Paint sequence: Wing and fuselage/tail painted separately followed by bottom, then sides, then top.
10. Airbrush Future acrylic floor wax. Any clear gloss acrylic will do. The gloss coat prevents the decals from silvering (i.e. looking like stuck-on plastic). Future acrylic can be airbrushed

straight, without thinner.

11. Use a sharp x-acto knife to trim the decals. Cut as close to the decal as possible, removing excess clear plastic film.
12. Apply the decals (with some soapy water solution to help positioning). Dry overnight and clean up with a damp cloth.
13. Spray another coat of Future acrylic wax before applying panel lines.

*(See glassing your foam model continued on page 7)*

# CVMA MEETING HIGHLIGHTS - May 2011



The meeting was called to order at 7:00 PM by Vice President Randy Meathrell. The pledge of allegiance was said by all.

President Jay Riddle is in California to attend the wedding of his son this weekend. Randy will be filling in for Jay for the next couple of months as President as Jay devotes his time to the field improvements and our newsletter editor Bob Shanks was away for grand children graduations and a wedding,

New member Dick Mastin was introduced to the club members.

Activities Director and Vice President Randy Meathrell

reported on the Combat Contest and Campout that was held the weekend of May 7. Graham Johnson won the Combat contest. We also had a swap meet that was successful for some and not for others.

Randy reported on the flight of Embry Riddle Univ. 2011 airplane. Randy submitted an article to AMA for publication about the event and our sponsorship of the college projects.

Saturday June 18 and 19 is the Prescott Valley Main Street Fair. We have been invited to present Combat Dog-fights on June 19 at 9:00 am. More to follow at the June 15 general meeting.

Our club has been asked for use of our field on August 20 for

War bird Pylon Races. Glenn Hiethold is following up on this event.

The Treasurers report was read, the lights went out and we had a break. After the break and the lights came back on the report was approved.

Dennis O'Connor suggested that we raffle off the foam trainer that we have in the storage box at the next meeting. Tom Root said that there were a couple of other un-used planes in there also. The members present agreed that we should raffle them off. Dennis and Tom volunteered to bring them to the June 15<sup>th</sup> meeting.

Max Bandy brought his scratch built Canard wing plane

that he has named "Scrapy". Randy brought his Nitro Planes F-117 Bob Noulin brought his Edge 540.

Bill Lindenthaler won a Slo-Stick and a Battery. Max Bandy won a Tubby Chubby Cub Plane.

Leonard Brown won a Slo-Stick motor and servo set and a T-Shirt. Greg Walsh won a Spectrum Servo and a Shirt. Jim Adolf won a spray gun. Ruth Collins and Richard Wright each won Shirts.

The door prize donated by Valley Hobby of a flight stand was won by new member Dick Mastin.

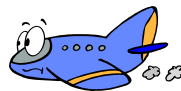
Thanks to Kris Johnson for the food goodies tonight and also to Max and Cinnamon Bandy for their Shirt Donations for the Raffle. Also thanks to Richard Wright for his donation of the paint spray gun.

Vice President Randy Meathrell closed the meeting at 8:07 PM.



Max and his cool canard.

Photos by Rick Nichols



Bob's Edge.



Randy's F-117

**VALLEY HOBBY RAFFLE**

**VALLEY HOBBY**

New member Dick Mastin won the flight stand for use at the field or in his workshop, thanks Donna.





Ladies and gentlemen, this is your captain speaking. There is a minor malfunction in the pressurization system, but no problem, an oxygen mask will come out of the unit above your seat automatically

**75<sup>th</sup> AMA Anniversary**  
 July 14th - 17th 2011  
 AMA Headquarters | Muncie, Indiana

**You're Invited!**  
**Celebrate 75 Years with the AMA.**

For details check out [ama75.com](http://ama75.com).

### *Glassing Your Foam Model (continued from page 5)*

14. Panel lines are drawn onto the model with gray pencils of varying shades, silver paint pen, and black pen. Use a 3-view from a book, or a scale plastic kit, as a guide. Use light panel lines over dark background, dark over medium or light background. Change the pen/pencil color when going from one background color to the other, or across a decal. Not hard, just time-consuming. Use flexible rulers from the drugstore to go around curves.
15. Seal the panel lines with a semi-gloss or flat clear acrylic (depending on your airplane and the results you want).
16. Use pastel chalks from the craft store to make smoke and gun stains. Scrape a bit of chalk powder off with a blade, then

use a fine brush to apply the powder on the model. Draw the brush in the direction of the airflow. Gently blow off the excess. When done, spray on the final coat of clear acrylic. Admire your handiwork, then go flying!



*Foam Corsair glassed and repainted smooth.*

### **Cleaning Pushrod Tubes**

The oily residue of model fuel sometimes makes its way into the pushrod tubes, making some tubes swell and soften slightly, this can make operation in curves almost impossible.

A simple cure is to apply a solution of powdered graphite, mixed with rubbing alcohol. Apply the solution with a syringe onto the rod (or it can be applied to the mouth of the tube while moving the rod in a back and forth to encourage the solution to circulate.) The mentholated or alcohol, washes away the oily residue and grit and leaves the graphite behind. *(AMA tip)*

## **SAFETY IS ALWAYS AN ISSUE**

I ran across this item about propellers in the AMA publication "The Insider" written by *Jim Tiller* the AMA "Insider" safety editor.

We all know it is imperative to balance a propeller before installing it on your airplane. It is also important to check propeller tracking whenever installing a new propeller. A propeller that is not tracking properly will cause vibration similar to that of an out-of-balance propeller.

Propellers can be out of alignment by manufacture, or from over tightening—especially with wood propellers. The problem is exacerb-

bated in large propellers with multiple holes. Each bolt should be tightened the same amount to prevent a tracking problem.

Once your propeller is installed, it is quite simple to check the tracking by setting up an indicator, such as a square next to the propeller blade. Tie down the airplane if necessary to prevent it moving as you turn the propeller through a couple of revolutions.

Each side of the propeller should show the same gap as you turn (see the picture). If your propeller is not tracking correctly, you can try sanding the

hub a little on the high side and then retesting.

With wooden propellers, sometimes just loosening the propeller, moving it a quarter turn, and retightening can solve the problem.

With large wooden propellers, you may want to retest the tracking when taking the airplane out of storage for the winter. Humidity and temperature changes sometimes cause warps.

If you cannot correct the tracking problem, it is better to set it aside than risk suffering some vibration related catastrophe.

Another interesting item from Jim's column was about getting safety sunglasses for flying.

There are many local and online sources with prices from \$10 to \$100. Regardless of the price, they must meet the American National Standards Institute (ANSI) requirements to have the label.

Just make sure that the glasses you purchase meet the ANSI Z87.1 standard. This safety standard requires the frames and lenses have been tested to withstand a 150-foot-pound impact with a steel

# ERAU STUDENTS AND PARENTS HERE FOR GRADUATION TREATED TO SUCCESSFUL CULMINATION OF DESIGNED AND BUILT UAV



Students, staff and parents observe



At least once during the academic year, Embry-Riddle Aeronautical University (ERAU) advanced aeronautical design class has an internal design contest with the students picking the one design they think will be successful.

With 5 wind tunnels on campus, a great fabrication laboratory and some great professors for guidance the students work out the design and build the UAV using full scale building techniques.

The Embry-Riddle Aeronautical University (ERAU), has campuses in Daytona Beach, Florida, Prescott, Arizona and the World Wide Campus. Embry Riddle is the world's largest, fully accredited university specializing in aviation and aerospace, and offers more than 30 undergraduate and graduate degree programs in its colleges of Arts and Sciences, Aviation, Business, and Engineering.

Embry-Riddle educates students at residential campuses in Daytona Beach, Florida; Prescott, Arizona, and through the Worldwide Campus at more than 150 locations in the United States, Europe, Asia, Canada, and the Middle East, and through Internet online learning.



Taxi Test before take off



Climb out after take off

This design, a pusher, has plenty of power.

Students bring back UAV after an exciting test flight, the student pilot and Army veteran UAV pilot Steve Riley landed it gently in the weeds off the runway after losing left aileron control using only rudder controls, he did a great job of flying the plane.



Start up procedures

